

The Author to
Dr Jeffries.

CAUTIONS

CONCERNING

COLD BATHING,

AND DRINKING THE

MINERAL WATERS.

[Price Six-pence.]

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AND DRINKING THE

MINERAL WATERS.

By WILLIAM BUCHAN, M. D.

Fellow of the Royal College of Physicians, Edinburgh.

BEING

An ADDITIONAL CHAPTER to the NINTH EDITION
of his DOMESTIC MEDICINE.

LONDON;

Printed for A. STRAHAN; T. CADELL in the Strand;
and J. BALFOUR, and W. CREECH, at Edinburgh.

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CAUTIONS CONCERNING COLD BATHING, AND DRINKING THE MINERAL WATERS.

AS it is now fashionable for persons of all ranks to plunge into the sea, and drink the mineral waters, I was desirous of rendering this work still more extensively useful, by the addition of a few practical *Observations on Sea Bathing, and drinking the Mineral Waters of this Country.* Finding it impossible to bring these observations within so narrow a compass as not to swell the book, already too large, into an enormous size, I resolved to confine myself to a few hints, or cautions; which may be of service to persons who bathe, or drink the mineral waters, without being able to put themselves under the care of a physician.

No part of the practice of medicine is of greater importance, or merits more the attention of the physician, as many lives are lost, and numbers ruin their healths, by cold bathing, and an imprudent use of the mineral waters. On some future occasion I may probably resume this subject, as I know not any work that contains a sufficient number of practical observations to regulate the patient's conduct in the use of these active and important medicines.

6 ON COLD BATHING, AND

WE have indeed many books on the mineral waters, and some of them are written with much ingenuity; but they are chiefly employed in ascertaining the contents of the waters by chymical analysis. This, no doubt, has its use, but is by no means of such importance as some may imagine. A man may know the chymical analysis of all the articles in the *materia medica*, without being able properly to apply any one of them in the cure of diseases. One page of practical observations is worth a whole volume of chymical analysis. But where are such observations to be met with? Few physicians are in a situation to make them, and fewer still are qualified for such a task. It can only be accomplished by practitioners who reside at the fountains, and who, possessing minds superior to local prejudices, are capable of distinguishing diseases with accuracy, and of forming a sound judgment respecting the genuine effects of medicines.

WITHOUT a proper discrimination with regard to the disease and the constitution of the patient, the most powerful medicine is more likely to do harm than good. Every one knows that the same physician who, by cold bathing, cured Augustus, by an imprudent use of the same medicine killed his heir. This induced the Roman senate to make laws for regulating the baths, and preventing the numerous evils which arose from an imprudent and promiscuous use of those elegant and fashionable pieces of luxury. But as no such laws exist in this country, *every one does that which is right in his own eyes*, and of course many must do wrong.

PEOPLE

DRINKING MINERAL WATERS.

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PEOPLE are apt to imagine that the simple element of water can do no hurt, and that they may plunge into it at any time with impunity. In this, however, they are much mistaken. I have known palsies and apoplexies occasioned by going into the cold bath, fevers excited by staying too long in it, and other maladies so much aggravated by its continued use, that they could never be wholly eradicated. Nor are examples wanting, either in ancient or modern times, of the baneful consequences which have arisen also from an injudicious application of the *warm* bath; but as warm baths are not so common in this country, and are seldom used but under the direction of a physician, I shall not enlarge on that part of the subject.

IMMERSION in cold water is a custom which lays claim to the most remote antiquity: indeed it must have been coëval with man himself. The necessity of water for the purposes of cleanliness, and the pleasure arising from its application to the body in hot countries, must very early have recommended it to the human species. Even the example of other animals was sufficient to give the hint. By instinct many of them are led to apply cold water in this manner; and some, when deprived of its use, have been known to languish, and even to die. But whether the practice of cold bathing arose from necessity, reasoning, or imitation, is an inquiry of no importance; our business is to point out the advantages which may be derived from it, and to guard people against an improper use of it.

THE cold bath recommends itself in a variety of cases; and is peculiarly beneficial to the inhabitants of populous cities, who indulge in idleness, and lead sedentary lives. In persons of this description the action of the solids is always too weak, which induces a languid circulation, a crude indigested mass of humours, and obstructions in the capillary vessels and glandular system. Cold water, from its gravity as well as its tonic power, is well calculated either to obviate or remove these symptoms. It accelerates the motion of the blood, promotes the different secretions, and gives permanent vigour to the solids. But all these important purposes will be more essentially answered by the application of *salt water*. This ought not only to be preferred on account of its superior gravity, but likewise for its greater power of stimulating the skin, which promotes the perspiration, and prevents the patient from catching cold.

It is necessary, however, to observe, that cold bathing is more likely to prevent, than to remove obstructions of the glandular or lymphatic system. Indeed, when these have arrived at a certain pitch, they are not to be removed by any means. In this case the cold bath will only aggravate the symptoms, and hurry the unhappy patient into an untimely grave. It is therefore of the utmost importance, previous to the patient's entering upon the use of the cold bath, to determine whether or not he labours under any obstinate obstructions of the lungs or other *viscera*; and where this is

is the case, cold bathing ought strictly to be prohibited *.

IN what is called a plethoric state, or too great a fulness of the body, it is likewise dangerous to use the cold bath, without due preparation. In this case there is great danger of bursting a blood-vessel, or occasioning an inflammation of the brain, or some of the *viscera*. This precaution is the more necessary to citizens, as most of them live full, and are of a gross habit. Yet, what is very remarkable, these people resort in crowds every season to the sea-side, and plunge in the water without the least consideration. No doubt they often escape with impunity, but does that give a sanction to the practice? Persons of this description ought by no means to bathe, unless the body has been previously prepared by bleeding, purging, and a spare diet.

ANOTHER class of patients, who stand peculiarly in need of the bracing qualities of cold water, is the nervous. This includes a great number of the male, and almost all the female inhabitants of great cities. Yet even those persons ought to be cautious

* The late celebrated Dr. Smollet has indeed said, that if he were persuaded he had an ulcer in the lungs, he would jump into the cold bath; but here the Doctor evidently shews more courage than discretion; and that he was more a man of wit than a physician, every one will allow. A nervous asthma, or an atrophy, may be mistaken for a pulmonary consumption; yet, in the two former, the cold bath proves often beneficial, though I never knew it so in the latter. Indeed, all the phthisical patients I ever saw, who had tried the cold bath, were evidently the worse for it.

in using the cold bath. Nervous people have often weak bowels, and may, as well as others, be subject to congestions and obstructions of the *viscera*; and in this case they will not be able to bear the effects of the cold water. For them, therefore, and indeed for all delicate people, the best plan would be to accustom themselves to it by the most pleasing and gentle degrees. They ought to begin with the temperate bath, and gradually use it cooler, till at length the coldest proves quite agreeable. Nature revolts against all great transitions; and those who do violence to her dictates, have often cause to repent of their temerity.

WHEREVER cold bathing is practised, there ought likewise to be tepid baths for the purpose mentioned above. Indeed it is the practice of some countries to throw cold water over the patient as soon as he comes out of the warm bath; but though this may not injure a Russian peasant, we dare not recommend it to the inhabitants of this country. The ancient Greeks and Romans, we are told, when covered with sweat and dust, used to plunge into rivers, without receiving the smallest injury. Though they might often escape danger from this imprudent act, yet their conduct was certainly contrary to all the rules of medicine; as I have known many robust men throw away their lives by such an attempt. I would not however advise patients to go into the cold water when the body is chilly; as much exercise, at least, ought to be taken, as may excite a gentle glow all over the body, but by no means so as to overheat it.

To

To young people, and particularly to children, cold bathing is of the last importance. Their lax fibres render its tonic powers peculiarly proper. It promotes their growth, increases their strength *, and prevents a variety of diseases incident to childhood. Were infants early accustomed to the cold bath, it would seldom disagree with them; and we should see fewer instances of the scrofula, rickets, and other diseases, which prove fatal to many, and make others miserable for life. Sometimes, indeed, these disorders render infants incapable of bearing the shock of cold water, but this is owing to their not having been early and regularly accustomed to it. It is however necessary here to caution young men against too frequent bathing; as I have known many fatal consequences result from the daily practice of plunging into rivers and continuing there too long.

THE most proper time of the day for using the cold bath is no doubt the morning, or immediately before dinner; and the best mode, that of immersion head foremost. As cold bathing has a constant tendency to propel the blood and other humours towards the head, it ought to be a rule always to wet that part first. By due attention to this

* The celebrated Galen says, that immersion in cold water is only fit for the young of lions and bears; and recommends warm bathing, as conducive to the growth and strength of infants. How egregiously do the greatest men err whenever they lose sight of facts, and substitute reasoning in physic, in place of observation and experience!

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circumstance, there is reason to believe, that violent headaches, and other complaints, which frequently proceed from cold bathing, might be often prevented.

THE cold bath, when continued too long, not only occasions an excessive flux of humours towards the head, but chills the blood, cramps the muscles, relaxes the nerves, and wholly defeats the intention of bathing. Hence, by not adverting to this circumstance, expert swimmers are often injured, and even sometimes lose their lives. All the beneficial purposes of cold bathing are answered by one single immersion; and the patient ought to be rubbed dry the moment he comes out of the water, and should continue to take exercise for some time after.

WHEN cold bathing occasions chilness, loss of appetite, listlessness, pain of the breast or bowels, a prostration of strength, or violent head-achs, it ought to be discontinued.

THOUGH these hints are by no means intended to point out all the cases where cold bathing may be hurtful; nor to illustrate its extensive utility as a medicine; yet, it is hoped, they may serve to guard people against some of those errors into which from mere inattention they are apt to fall; and thereby not only endanger their own lives, but bring an excellent medicine into disrepute*.

THE

* Since the preceding Observations have been sent to the Press, a circumstance has occurred, which affords the strongest proof that could be given, of the danger of plunging at random

THE internal use of water, as a medicine, is no less an object of the physician's attention than the external. Pure elementary water is indeed the most inoffensive of all liquors, and constitutes a principal part of the food of every animal. But this element is often impregnated with substances of a very active and penetrating nature; and of such an insidious quality, that, while they promote certain secretions, and even alleviate some disagreeable symptoms, they weaken the powers of life, undermine the constitution, and lay the foundation of

dom into cold water. When I heard of the celebrated Mr. Colman's illness, and that it had happened at Margate, I immediately suspected the cause, and mentioned my suspicion to some medical friends; but as none of them could inform me concerning the real circumstances of his case, I should have taken no notice of it, had not the following Letter in the London Chronicle struck my attention.

To the P R I N T E R.

“ SIR,

“ Having seen in your own and other London papers, serious accounts of Mr. Colman's illness, I, who have attended him during the whole time, think it but justice to him and his many friends, to give you a plain and true account of his case and present situation.

“ Mr. Colman's disorder was a combination of the gout and palsy, the last of which was occasioned by his unadvisedly bathing in the sea at an improper period, which struck in the gout; the consequences, as might be expected, soon became very serious, and his situation extremely dangerous, &c.

(Signed) JOHN SILVER, Surgeon.”

MARGATE,
Nov. 5, 1785.

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worse

worse diseases than those which they were employed to remove. Of this every practitioner must have seen instances; and physicians of eminence have more than once declared that they have known more diseases occasioned than removed by the use of mineral waters. This, doubtless, has proceeded from the abuse of those powerful medicines, which evinces the necessity of using them with caution.

By examining the contents of the mineral waters which are most used in this country, we shall be enabled to form an idea of the danger which may arise from an improper application of them either externally or internally, though it is to the latter of these that the present observations are chiefly confined.

THE waters most in use for medical purposes in Britain, are those impregnated with salts, sulphur, or iron, either separately, or variously combined. Of these the most powerful is the saline sulphureous water of Harrowgate, of which I have had more occasion to observe the pernicious consequences, when improperly used, than of any other. To this therefore the following remarks will more immediately relate, though they will be found applicable to all the purging waters in the kingdom which are strong enough to merit attention.

THE errors which so often defeat the intention of drinking the purgative mineral waters, and which so frequently prove injurious to the patient, proceed from the manner of drinking, the quantity taken, the regimen pursued, or, using them in cases where they are not proper.

DRINKING MINERAL WATERS. 15

A VERY hurtful prejudice still prevails in this country, that all diseases must be cured by medicines taken into the stomach, and that the more violently these medicines operate, they are the more likely to have the desired effect. This opinion has proved fatal to thousands; and will, in all probability, destroy many more before it can be wholly eradicated. Purging is often useful in acute diseases, and in chronical cases may pave the way for the operation of other medicines; but it will seldom perform a cure; and by exhausting the strength of the patient, will often leave him in a worse condition than it found him. That this is frequently the case with regard to the more active mineral waters, every person conversant in these matters will readily allow.

STRONG stimulants applied to the stomach and bowels for a length of time, must tend to weaken and destroy their energy; and what stimulants are more active than salt and sulphur, especially when these substances are intimately combined, and carried through the system by the penetrating medium of water? Those bowels must be strong indeed, which can withstand the daily operation of such active principles for months together, and not be injured. This, however, is the plan pursued by most of those who drink the purging mineral waters, and whose circumstances will permit them to continue long enough at those fashionable places of resort.

MANY people imagine, that every thing depends on the quantity of water taken, and that the more they drink they will the sooner get well. This is

an egregious error; for, while the unhappy patient thinks he is by this means eradicating his disorder, he is often, in fact, undermining the powers of life, and ruining his constitution. Indeed nothing can do this so effectually as weakening the powers of digestion by the improper application of strong stimulants. The very essence of health depends on the digestive organs performing their due functions, and the most tedious maladies are all connected with indigestion.

DRINKING the water in too great quantity, not only injures the bowels and occasions indigestion, but generally defeats the intention for which it is taken. The diseases for the cure of which mineral waters are chiefly celebrated, are mostly of the chronic kind; and it is well known that such diseases can only be cured by the slow operation of alteratives, or such medicines as act by inducing a gradual change in the habit. This requires length of time, and never can be effected by medicines which run off by stool, and only operate on the first passages.

THOSE who wish for the cure of any obstinate malady from the mineral waters, ought to take them in such a manner as hardly to produce any effect whatever on the bowels. With this view a half-pint glass may be drank at bed-time *, and the

same

* When I speak of drinking a glass of the water over-night, I must beg leave to caution those who follow this plan against eating heavy suppers. The late Dr. Daltry of York, who was the first that brought the Harrowgate-waters into repute, used to advise his patients to drink a glass before they went to bed; the

DRINKING MINERAL WATERS. 17

same quantity an hour before breakfast, dinner, and supper. The dose, however, must vary according to circumstances. Even the quantity mentioned above will purge some persons, while others will drink twice as much without being in the least moved by it. Its operation on the bowels is the only standard for using the water as an alterative. No more ought to be taken than barely to move the body; nor is it always necessary to carry it this length, provided the water goes off by the other emunctories, and does not occasion a chilness, or flatulency in the stomach or bowels. When the water is intended to purge, the quantity mentioned above may be all taken before breakfast.

I WOULD not only caution patients who drink the purging mineral waters over-night, to avoid heavy suppers, but also from eating heavy meals at any time. The stimulus of water, impregnated with salts, seems to create a false appetite. I have seen a delicate person, after drinking the Harrowgate waters of a morning, eat a breakfast sufficient to have served two ploughmen, devour a plentiful dinner of flesh and fish, and to crown all, eat such a supper as might have satisfied a hungry porter. All this indeed the stomach seemed to crave, but this craving had better remain not quite satisfied, than that the stomach should be loaded with what exceeds its powers. To starve patients was never my plan, but I am clearly of opinion, that, in the use of all the purging mineral waters, a light and rather diluting

the consequence of which was, that having eat a flesh supper, and the water operating in the night, they were often tormented with gripes, and obliged to call for medical assistance.

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diet is the most proper ; and that no person, during such a course, ought to eat to the full extent of what his appetite craves.

To promote the operation of mineral waters, and to carry them through the system, exercise is indispensably necessary. This may be taken in any manner that is most agreeable to the patient, but he ought never to carry it to excess. The best kinds of exercise are those connected with amusement. Every thing that tends to exhilarate the spirits, not only promotes the operation of the waters, but acts as a medicine. All who resort to the mineral waters ought therefore to leave every care behind, to mix with the company, and to make themselves as cheerful and happy as possible. From this conduct, assisted by the free and wholesome air of those fashionable places of resort, and also the regular and early hours which are usually kept, the patient often receives more benefit than from using the waters.

But the greatest errors in drinking the purging mineral waters arise from their being used in cases where they are absolutely improper, and adverse to the nature of the disease. When people hear of a wonderful cure having been performed by some mineral water, they immediately conclude that it will cure every thing, and accordingly swallow it down, when they might as well take poison. Patients ought to be well informed, before they begin to drink the more active kinds of mineral waters, of the propriety of the course, and should never persist in using them when they are found to aggravate the disorder.

IN all cases where purging is indicated, the saline mineral waters will be found to fulfil this intention better than any other medicine. Their operation, if taken in proper quantity, is generally mild; and they are neither found to irritate the nerves, nor debilitate the patient, so much as the other purgatives.

As a purgative, these waters are chiefly recommended in diseases of the first passages, accompanied with, or proceeding from, inactivity of the stomach and bowels, acidity, indigestion, vitiated bile, worms, putrid fardes, the piles, and jaundice. In most cases of this kind, they are the best medicines that can be administered. But when used with this view, it is sufficient to take them twice, or at most three times a week, so as to move the body three or four times; and it will be proper to continue this course for a few weeks.

BUT the operation of the more active mineral waters is not confined to the first passages. They often promote the discharge of urine, and not unfrequently increase the perspiration. This shews that they are capable of penetrating into every part of the body, and of stimulating the whole system. Hence arises their efficacy in removing the most obstinate of all disorders, *obstructions of the glandular and lymphatic system*. Under this class is comprehended the scrofula or *King's evil*, indolent tumours, obstructions of the liver, spleen, kidneys, and mesenteric glands. When these great purposes are to be effected, the waters must be used in the gradual manner mentioned above, and persisted in for a length of time. It will be proper, however, now and then to discontinue their use for a few days.

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THE next great class of diseases where mineral waters are found to be beneficial, are those of the skin, as the itch, scab, tetter, ringworms, scaly eruptions, leprosies, blotches, foul ulcers, &c. Though these may seem superficial, yet they are often the most obstinate which the physician has to encounter, and not unfrequently set his skill at defiance: But they will sometimes yield to the application of mineral waters for a sufficient length of time, and in most cases at least these waters deserve a trial. The saline sulphureous waters, such as those of Moffat in Scotland, and Harrowgate in England, are the most likely to succeed in diseases of the skin; but for this purpose it will be necessary not only to drink the waters, but likewise to use them externally.

To enumerate more particularly the qualities of the different mineral waters, to specify those diseases in which they are respectively indicated, and to point out their proper modes of application, would be an useful, and by no means a disagreeable employment; but as the limits prescribed to these remarks, being only one sheet, will not allow me to treat the subject more at length, I shall conclude by observing, that whenever the mineral waters are found to exhaust the strength, depress the spirits, take away the appetite, excite fevers, distend the bowels, occasion or increase a cough, or where there is reason to suspect an ulcer of the lungs, they ought to be discontinued.

THE END.